

Work Order ID 128312

Wednesday, January 14, 2015 1:32:08 PM

128312

Page 1

Item ID: D2435 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Bearpaw
Start Date: 1/14/2015 Start Qty: 8.00 ***8*** Cust Item ID:
Required Date: 1/14/2015 Req'd Qty: 8.00 ***8*** Customer:
Reference:

Approvals: Process Plan: MLJ Date: 15-01-14 Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
Run Start ***NR1***
Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2435	Rev E1								

120 FLOW WATER JET 0.00
120 Waterjet 8 ~~8~~ Jm 15-1-23
Memo 0.00
FLOW CNC Waterjet CUT BLANK AS PER FILE D2435
UHMW 1"

130 HAAS CNC VERTICAL MACHINING #1 0.00
130 HAAS 1 8 JFL 2015-2-4
Memo 0.00 1/56
HAAS CNC vertical machine #1
1-Inspect material for defects or damage prior to machining
2-Machine as per Folio FA789 and Dwg D2435 Identify as D2435
3-Deburr

140 QC2- Inspect parts off machine FAI/FAIB 0.00
140 QC 8 JFL 2015-2-4
Memo 0.00 1/56
Quality Control

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
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Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Page 2

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	QC8- Inspect parts - second check	0.00				8	0		DAS 44 9-89 15/02/05
150									
QC	Memo	0.00							
Quality Control									
151	Identify as per dwg & Stock Location: <u>pk</u>	0.00				8	15/02/00	sf	
151									
Packaging	Memo	0.00							
Packaging									
190	QC21- Final Inspection - Work Order Release	0.00							
190									
QC	Memo	0.00							
Quality Control									

MLT 1502-23

15.2-20

DQA: _____ Date: _____



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Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Picklist Print

Wednesday, January 14, 2015 1:32:11 PM

Page 1

Work Order ID: 128312

128312

Parent Item: D2435

D2435

Parent Item Name: Bearpaw

Start Date: 1/14/2015

Required Date: 1/14/2015

Start Qty: 8.00

Required Qty: 8.00

Comments:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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MUHMWB10

Purchased

No

120

sf

38.0000

3.2

26

MUHMWB10

**

Jm15-1-23

UHMW 1" Black - 48"x120" Tivar Mfg.#52480104

Location

Loc Qty

Loc Code

MAT018

38

m128092

38

131335

131335

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DART AEROSPACE LTD		Work Order:	128312
Description: Bearpaw		Part Number:	D2435
Inspection Dwg: D2435 Rev: E1		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ **First Article**

 ☐ **Prototype**

Inspection Sheet Drawing Dimension		Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
A	0.063 x 45°	+0.030/-0.010	0.063	✓		depth g	JFC-07
B	5.500	+/-0.030	5.502	✓		Caliper	JFC-01
C	0.200	+/-0.030	0.202	✓		depth g	JFC-07
D	R0.250	+/-0.030	R0.250	✓		rad g	Shop
E	0.250	+/-0.010	0.252	✓		Caliper	JFC-01
F	0.625	+/-0.030	0.632	✓		"	"
G	0.25 x 45°	+/-0.030	0.25x45°	✓		depth g	JFC-07
H	0.375	+/-0.010	0.382	✓		Caliper	JFC-01
I	19.000	+/-0.030	19.00	✓		tape	JFC-06
J	0.950	+0.030/-0.010	0.960	✓		Caliper	JFC-01
K	Ø0.260	+0.005/-0.000	0.260	✓		"	"
L	Ø0.930	+/-0.030	0.929	✓		"	"
M	0.30	+0.030/-0.000	0.316	✓		depth g	GA-09
N	0.375	+/-0.030	0.379	✓		Caliper	JFC-01
O	7.375	+/-0.030	7.375			"	"
P	4.250	+/-0.010	4.280			"	"
Q	2.000	+/-0.030	2.000			"	"
R	9.000	+/-0.010	9.000			"	CNC-02
S	15.750	+/-0.030	15.750			tape	JFC-06

DAS

Measured by: JFC	Audited by: 44 9-89	Prototype Approval:	N/A
Date: 2015-2-4	Date: 15/02/05	Date:	

Rev	Date	Change	Revised by	Approved
A	03.09.22	New Issue P/O K10007	KJ/RF TF	#

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FAULT CATEGORY

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RELEASED
98.06.17 KE

DESIGN	DRAWN BY	DART AEROSPACE LTD
KE	KE	HAMKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO.
98	98	D2435
DATE	TITLE	SHEET 1 OF 2
98.05.19	BEARPAW	SCALE
		1:5
A	96.01.24	NEW ISSUE
B	96.03.26	CHANGE BORE AND C'BORE DEPTH
C	97.05.07	CHANNEL & C'BORE DEPTH CHANGED
D	97.10.17	R1.5 BORE WAS R2.637 (TSR A469)
E	98.05.19	CHANGE C'BORE, R1.58 WAS R1.50

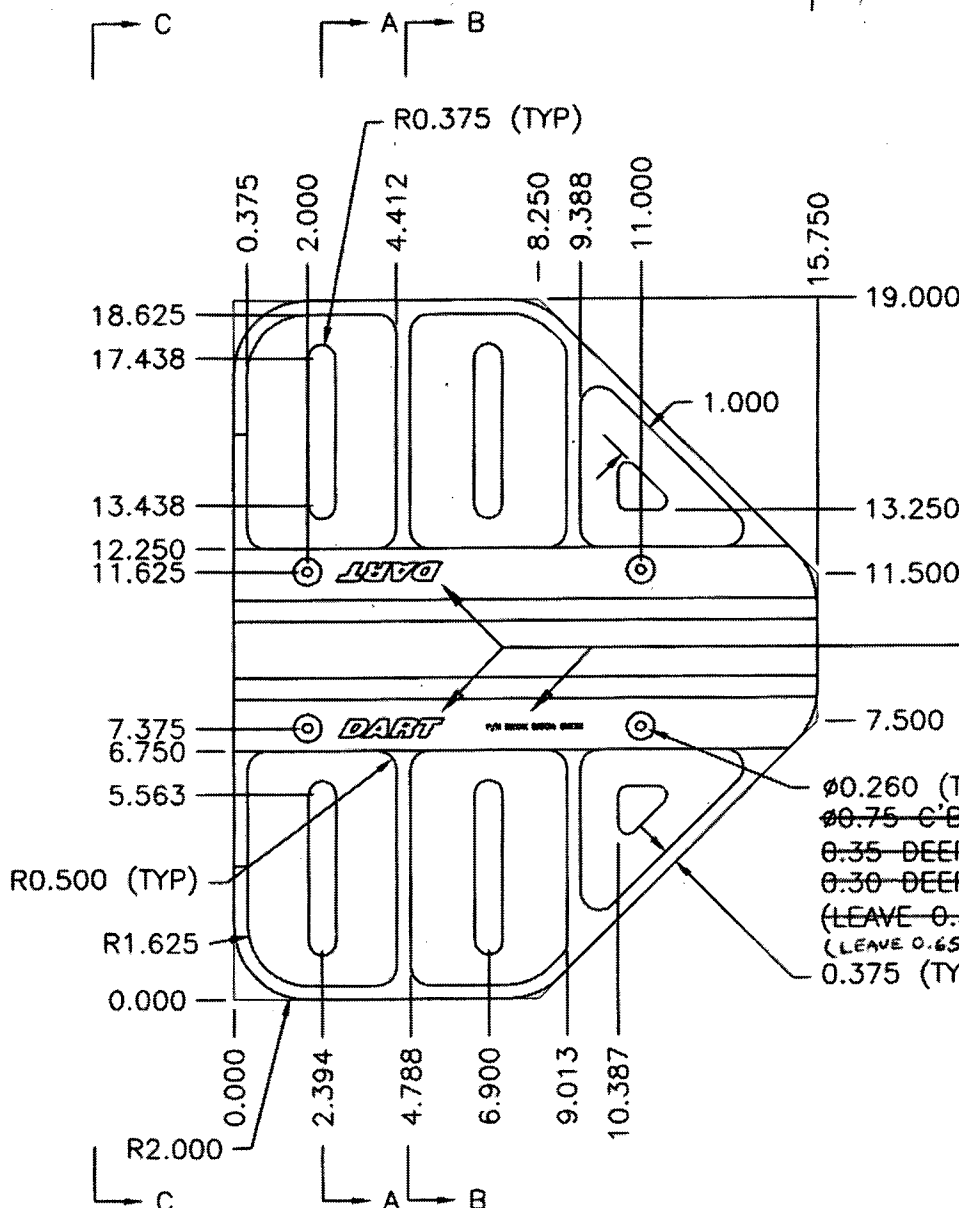
ENGRAVE LOGO TO MAX DEPTH OF 0.012. ENGRAVE PART AND BATCH NUMBERS TO MAX DEPTH OF 0.010. (TYPICAL LOCATION AS ILLUSTRATED)

SHOP ONLY
RETURNED
UNCONTROLLED COPY
SUBJECT TO REWORK

NO. 128312-103
1501-14



E1 02.12.17 $\phi 0.93$ WAS $\phi 0.75$ ~~FEA~~



MATERIAL: UHMW BLACK PER SPEC CONTROL DRAWING D2689
1.00 THICK (MACHINE TO 0.950)

DQA: _____ Date: _____



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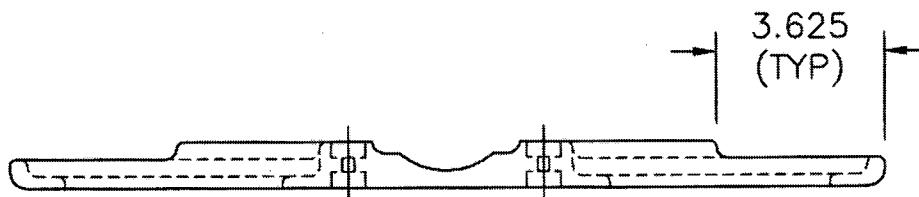
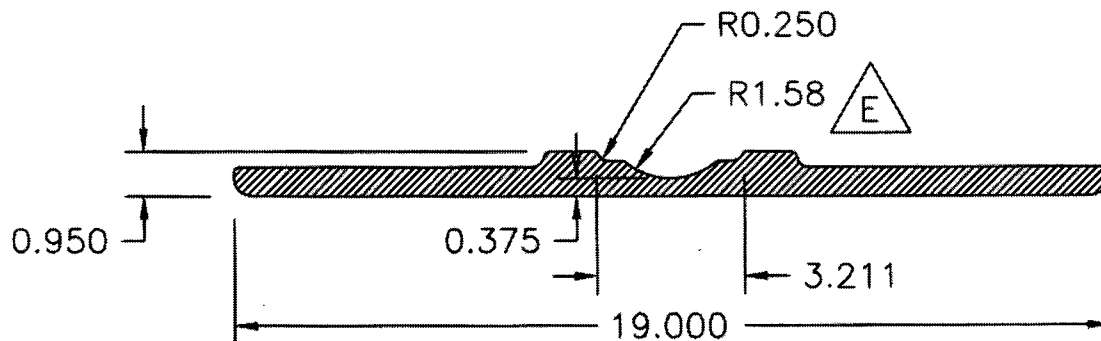
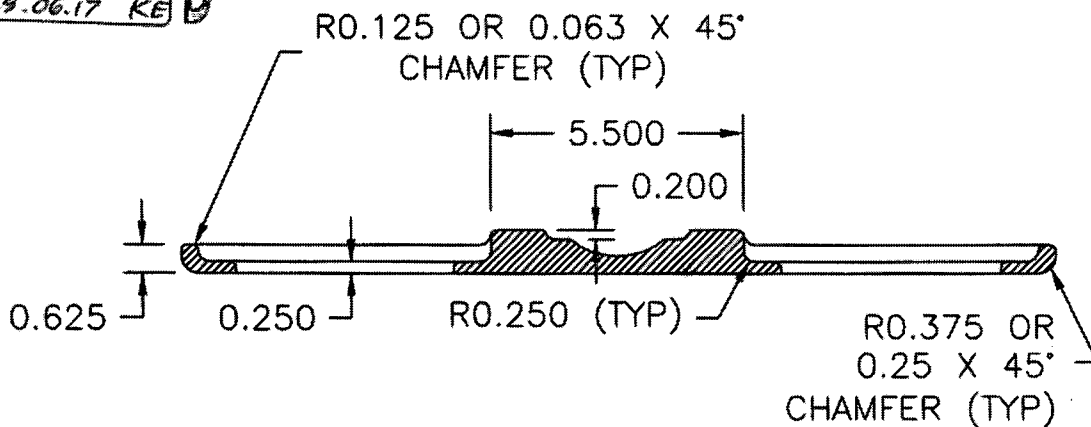
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DESIGN <i>KE</i>	DRAWN BY <i>KE</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>DM</i>	APPROVED <i>KE</i>	DRAWING NO. D2435	REV. E SHEET 2 OF 2
DATE 98.05.19		TITLE BEARPAW	SCALE 1:4

RELEASED
99.06.17 KE



SECTION C-C

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

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